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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/961,395	09/25/2001	Harald Jakob	P 265258 000345 PV	5500
909	7590	02/06/2004	EXAMINER	
PILLSBURY WINTHROP, LLP			LISH, PETER J	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
			1754	

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/961,395

Applicant(s)

JAKOB ET AL

Examiner

Peter J Lish

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

Art Unit: 1754

### **DETAILED ACTION**

Applicant's arguments, filed 11/05/03 have been considered but are moot in view of the new ground(s) of rejection.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amended claims recite that the additives and the sodium percarbonate product do not contain a condensed phosphate, whereas the specification and original claims only support the limitations that the additives and the sodium percarbonate product do not contain the combination of a magnesium salt and a condensed phosphate.

#### ***Claim Rejections - 35 USC § 103***

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bewersdorf et al. (US 5,560,896).

Art Unit: 1754

Bewersdorf teaches a process for the production of sodium percarbonate. The process comprises spraying an aqueous sodium carbonate solution and a hydrogen peroxide solution onto nuclei in a fluidized bed and evaporating the water. The process utilizes a ternary atomizer nozzle, which allows the solutions to be sprayed through separate channels in order to provide external mixing of the solution, thus preventing the need for condensed phosphates. The hydrogen peroxide solution customarily contains 30-75 % by weight hydrogen peroxide, while the sodium carbonate solution contains above 10 %, and especially preferred about 30 %, by weight sodium carbonate. The fluidized bed is maintained at a temperature of between 40 and 95 °C. If needed, additives can be added to either of the hydrogen peroxide and sodium carbonate solutions in order to influence the product qualities and especially to elevate active oxygen stability. The preferred additives are magnesium salts, usually added to the hydrogen peroxide in the form of the sulfate, and water glass, usually added to the sodium carbonate solution. The amounts of these additives are not explicitly taught by Bewersdorf et al., however, it would have been obvious to one of ordinary skill at the time of invention to use an amount between 50 and 2000 ppm, or more specifically between 200 and 1000 ppm, based on the product, as doing so is viewed to be the optimization of a known process, which could have been determined through routine experimentation, and is held to be obvious by *In re Boesch* 205 USPQ 215.

Regarding claims 6 and 14-15, it would have been obvious to use a water glass, including one having an  $\text{SiO}_2/\text{Na}_2\text{O}$  module of from 1 to 3, more specifically from 1 to 2, in an amount corresponding to 0.1 to 1 wt.%  $\text{SiO}_2$ , more specifically 0.1 to 0.5 wt.%  $\text{SiO}_2$ , based on sodium percarbonate, as doing so is viewed to be the optimization of a known process, which could have

Art Unit: 1754

been determined through routine experimentation, and is held to be obvious by *In re Boesch* 205 USPQ 215.

Regarding claims 8-11 and 18-19, it is expected that the sodium percarbonate produced by the process of Bewersdorf et al., as above, will have identical properties to those claimed, as they are produced by the same process.

Regarding claim 4, it is noted that the claim does not contain a positive limitation. The claim limits the complexing agent of claim 1, however, the use of the complexing agent is not required by claim 1.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bewersdorf et al. ('896) in view of Brichard et al. (US 4,428,914).

Bewersdorf teaches a process for the production of sodium percarbonate. The process comprises spraying an aqueous sodium carbonate solution and a hydrogen peroxide solution onto nuclei in a fluidized bed and evaporating the water. The process utilizes a ternary atomizer nozzle, which allows the solutions to be sprayed through separate channels in order to provide external mixing of the solution, thus preventing the need for condensed phosphates. The hydrogen peroxide solution customarily contains 30-75 % by weight hydrogen peroxide, while the sodium carbonate solution contains above 10 %, and especially preferred about 30 %, by weight sodium carbonate. The fluidized bed is maintained at a temperature of between 40 and 95 °C. If needed, additives can be added to either of the hydrogen peroxide and sodium carbonate solutions in order to influence the product qualities and especially to elevate active oxygen stability. The preferred additives are magnesium salts, usually added to the hydrogen

Art Unit: 1754

peroxide in the form of the sulfate, and water glass, usually added to the sodium carbonate solution. Bewersdorf et al do not explicitly teach the amounts of these additives.

Brichard, in a similar process, teaches that additives, such as stabilizers of magnesium sulfate and sodium silicate are added to the aqueous solutions. The stabilizers are generally added in amounts between about 1-20 g of stabilizer per kg of sodium percarbonate product, which is equivalent to between 100 - 20,000 ppm (column 4, lines 19-31). It would have been obvious to one of ordinary skill at the time of invention in the process of Bewersdorf et al. to add the stabilizers in an amount corresponding to the amount generally used, as taught by Brichard et al. to accomplish the desired effect of the additives.

Regarding claims 8-11 and 18-19, it is expected that the sodium percarbonate produced by the process of Bewersdorf et al., as above, will have identical properties to those claimed, as they are produced by the same process.

Regarding claim 4, it is noted that the claim does not contain a positive limitation. The claim limits the complexing agent of claim 1, however, the use of the complexing agent is not required by claim 1.

Claims 6 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bewersdorf ('896) as applied to claim 1 above, and further in view of Bewersdorf et al. (USPN 5,714,201).

Bewersdorf et al. '896 teach that sodium silicate is added to the aqueous solutions as a stabilizer. However, they do not teach the specific amount to be added or the modulus.

Bewersdorf et al. '201 teach a similar fluidized bed process with the addition of a sodium silicate

Art Unit: 1754

with a modulus between 1 and 3 to an aqueous solution. The sodium silicate is introduced in an amount between 0.1 and 2.5 wt%, preferably between 0.5 and 1 wt%, in each case calculated as  $\text{SiO}_2$  and relative to sodium percarbonate (column 4, lines 5-11). It would have been obvious to one of ordinary skill in the art at the time of invention to add the sodium silicate, or water glass, as a stabilizer in the process of Brewersdorf et al '896, in the amounts taught by Brewersdorf et al. '201, in order to accomplish the desired effect of the additive.


### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Lish whose telephone number is 571-272-1354. The examiner can normally be reached on 9:00-6:00 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

PL



STUART L. HENDRICKSON  
PRIMARY EXAMINER